Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1   1.   (Currently Amended) A method for correlating services within a computer network, the
2   method comprising:
3   providing a message interchange network for exchanging application-level messages
4   between services, the message interchange network **being built on an open platform**
5   **overlaying a public network and** managing a plurality of services, ~~which are~~ each **of the**
6   **services being** accessible by a plurality of services **according to properties and permissions**
7   **associated with each service in the plurality of services**; and
8   tracking correlation information regarding each application-level message received into
9   message interchange network, wherein the application-level messages are being sent between
10   pairs of the services, wherein the correlation information for each application-level message
11   pertains to each application-level message and any other application-level messages related to
12   the each application-level message**, the correlation information including one or more of: a**
13   **Hop Identifier (ID) uniquely identifying a hop between a sender and receiver of the each**
14   **application-level message, call information regarding a call to which the each application-**
15   **level message and any other related application-level message belongs, and session**
16   **information regarding a session to which the each application-level message and any other**
17   **related application-level message belongs.**

1   2.   (Cancelled)

1   3   (Cancelled)

1   4.   (Currently Amended) A method as recited in claim [[3]] <u>1</u>, wherein the message
2   information for each application-level message further includes an identification of the each
3   application-level message's sending service and receiving service.

1   5.   (Currently Amended) A method as recited in claim [[3]] 1, wherein the message
2   information for each application-level message further includes an indication as to whether the
3   each application-level message has completed transmission.

1   6.   (Previously Presented) A method as recited in claim 5, wherein the message information
2   for each application-level message further includes a reason or error log regarding why the each
3   application-level message has failed to complete its transmission if the each application-level
4   message has failed.

1   7.   (Currently Amended) A method as recited in claim [[3]] 1, wherein the message
2   information for each application-level message further includes a portion of the each message
3   content.

1   8.   (Currently Amended) A method as recited in claim [[3]] 1, wherein the message
2   information for each application-level message further includes two or more of the following: an
3   identification of the each application-level message's sending and receiving service, an
4   indication as to whether the each application-level message has completed transmission, a reason
5   or error log regarding why the each application-level message has failed to complete its
6   transmission if the each application-level message has failed, and a portion of the each
7   application-level message content, a size of the each application-level message, a topic of the
8   each application-level message, a status on processing steps taken on the each application-level
9   message, and specification of any protocols used in receiving and sending the each application-
10 level message.

1   9.   (Currently Amended) A method as recited in claim [[2]] 1, wherein the call information
2   for each call includes a Call Identifier (ID) uniquely identifying the each call.

1   10.   (Original) A method as recited in claim 9, wherein the call information for each call
2   further includes two or more of the following: an indication as to whether the each call is
3   complete and a reason for the call not being complete if the each call fails to complete, a type of
4   each call, a receiving and sending time for the each call, a sender and recipient service of each
5   call, a status of policy evaluation for each call, and a set of hops in each call.

1　11.　(Currently Amended)　A method as recited in claim [[2]] 1, wherein the session
2　information for each session includes a Session Identifier (ID) uniquely identifying the each
3　session.

1　12.　(Original)　A method as recited in claim 11, wherein the session information for each
2　session further includes an indication as to whether the each session is complete and a reason for
3　the session not being complete if the each session fails to complete.

1　13.　(Previously Presented)　A method as recited in claim 11, wherein the session information
2　for each session further includes a calculated or executed route for application-level messages
3　sent within the each session.

1　14.　(Original)　A method as recited in claim 11, wherein the session information for each
2　session further includes an identity and status of each service of the each session.

1　15.　(Original)　A method as recited in claim 11, wherein the session information for each
2　session further includes two or more of the following: an indication as to whether the each
3　session is complete and a reason for the session not being complete if the each session fails to
4　complete, a calculated or executed route for messages sent within the each session, and an
5　identity and status of each service of the each session, an initiating time and completion time for
6　each session, and an indication of a set of calls in each session.

1　16.　(Currently Amended)　A method as recited in claim [[2]] 1, wherein each message
2　belongs to a particular call between two of the services.

1　17.　(Currently Amended)　A method as recited in claim [[2]] 1, wherein each call includes a
2　request message and a response message or a notification message.

1　18.　(Currently Amended)　A method as recited in claim [[2]] 1, wherein a call is defined as a
2　set of predefined application-level message types.

1　19.　(Currently Amended)　A method as recited in claim [[2]] 1, wherein a session is
2　determined by the services which send application-level messages for the set of calls as a set of
3　calls.

1 20. (Original) A method as recited in claim 1, wherein at least some of services are
2 implemented on different computer systems and at least some of these computer systems differ
3 from a computer system which implements the message interchange network.

1 21. (Currently Amended) A method as recited in claim [[2]] 1, wherein the tracking of
2 correlating information comprises:
3   receiving a current application-level message at the message interchange network,
4 wherein the current application-level message belongs to a current session and a current call;
5   when the received current application-level message is a first message received for the
6 current session, assigning a session identifier for the current message and embedding the session
7 identifier in the current application-level message prior to forwarding it the application-level
8 message to its destination service;
9   when the received current application-level message is a first message received for the
10 current call, assigning a call identifier for the current application-level message and embedding
11 the call identifier in the current application-level message prior to forwarding it the application-
12 level message to its destination service;
13   assigning a hop identifier for the current application-level message which uniquely
14 identifies the current application-level message; and
15   associating and storing the session identifier, the call identifier, and the hop identifier,
16 along with message information, call information, and session information for the received
17 application-level message.

1 22. (Currently Amended) A method as recited in claim [[2]] 1, further comprising:
2   receiving a query for correlation information regarding a particular session or call,
3 wherein the query is sent by a first one of the services; and
4   sending correlation information to the first service related to the particular session or call
5 of the query.

1 23. (Previously Presented) A method as recited in claim 22, wherein the correlation
2 information includes information regarding application-level messages sent between more than
3 two services.

1   24.   (Original) A method as recited in claim 22, further comprising determining whether the

2   first service is authorized to make the query and only sending correlation information to the first

3   service when it is determined that the first service is authorized.

1   25.   (Original) A method as recited in claim 1, wherein at least one of the services is a

2   routing script.

1   26.   (Previously Presented) A method as recited in claim 1, wherein the correlation

2   information includes at least one message identifier specified in at least one of the application-

3   level messages which is sent by a sending service, the method further comprising:

4   receiving a query for correlation information regarding a particular message identifier,

5   wherein the query is sent by a first one of the services; and

6   sending correlation information to the first service related to the particular message

7   identifier of the query.

1   27.   (Currently Amended) A computer system operable to correlate services within a

2   computer network the computer system comprising:

3   one or more processors;

4   one or more memory, wherein at least one of the processors and memory are adapted for:

5   providing a message interchange network for exchanging application-level

6   messages between services, the message interchange network **being built on an open**

7   **platform overlaying a public network and** managing a plurality of services**,** ~~which are~~

8   each **of the services being** accessible by a plurality of services **according to properties**

9   **and permissions associated with each service in the plurality of services**; and

10   tracking correlation information regarding each application-level message

11   received into message interchange network, wherein the application-level messages are

12   being sent between pairs of the services, wherein the correlation information for each

13   application-level message pertains to each application-level message and any other

14   application-level messages related to the each application-level message**, the correlation**

15   **information including one or more of: a Hop Identifier (ID) uniquely identifying a**

16   **hop between a sender and receiver of the each application-level message, call**

17   **information regarding a call to which the each application-level message and any**

18   **other related application-level message belongs, and session information regarding a**

19 **session to which the each application-level message and any other related**

20 **application-level message belongs.**

1 28. (Cancelled)

1 29 (Cancelled)

1 30. (Currently Amended) A computer system as recited in claim [[29]] 27, wherein the

2 message information for each application-level message further includes two or more of the

3 following: an identification of the each application-level message's sending and receiving

4 service, an indication as to whether the each application-level message has completed

5 transmission, a reason or error log regarding why the each application-level message has failed

6 to complete its transmission if the each application-level message has failed, and a portion of the

7 each application-level message content, a size of the each application-level message, a topic of

8 the each application-level message, a status on processing steps taken on the each application-

9 level message, and specification of any protocols used in receiving and sending the each

10 application-level message.

1 31. (Currently Amended) A computer system as recited in claim [[28]] 27, wherein the call

2 information for each call includes a Call Identifier (ID) uniquely identifying the each call.

1 32. (Original) A computer system as recited in claim 31, wherein the call information for

2 each call further includes two or more of the following: an indication as to whether the each call

3 is complete and a reason for the call not being complete if the each call fails to complete, a type

4 of each call, a receiving and sending time for the each call, a sender and recipient service of each

5 call, a status of policy evaluation for each call, and a set of hops in each call.

1 33. (Currently Amended) A computer system as recited in claim [[28]] 27, wherein the

2 session information for each session includes a Session Identifier (ID) uniquely identifying the

3 each session.

1 34. (Original) A computer system as recited in claim 33, wherein the session information for

2 each session further includes two or more of the following: an indication as to whether the each

3 session is complete and a reason for the session not being complete if the each session fails to

4   complete, a calculated or executed route for messages sent within the each session, and an

5   identity and status of each service of the each session, an initiating time and completion time for

6   each session, and an indication of a set of calls in each session.

1   35.   (Previously Presented) A computer system as recited in claim 31, wherein each call

2   includes a request message and a response message or a notification message.

1   36.   (Currently Amended) A computer system as recited in claim [[28]] 27, wherein a call is

2   defined as a set of predefined application-level message types.

1   37.   (Original) A computer system as recited in claim 36, wherein a session is determined by

2   the services which send application-level messages for the set of calls as a set of calls.

1   38.   (Original) A computer system as recited in claim 27, wherein at least some of services

2   are implemented on difference computer systems and at least some of these computer systems

3   differ from a computer system which implements the message interchange network.

1   39.   (Currently Amended) A computer system as recited in claim [[28]] 27, wherein the

2   tracking of correlating information comprises:

3   receiving a current application-level message at the message interchange network,

4   wherein the current application-level message belongs to a current session and a current call;

5   when the received current application-level message is a first message received for the

6   current session, assigning a session identifier for the current message and embedding the session

7   identifier in the current application-level message prior to forwarding it the application-level

8   message to its destination service;

9   when this the received current application-level message is a first message received for

10   the current call, assigning a call identifier for the current application-level message and

11   embedding the call identifier in the current application-level message prior to forwarding it the

12   application-level message to its destination service;

13   assigning a hop identifier for the current application-level message which uniquely

14   identifies the current application-level message; and

15   associating and storing the session identifier, the call identifier, and the hop identifier,

16   along with message information, call information, and session information for the received

17   application-level message.

1   40.   (Currently Amended) A computer system as recited in claim [[28]] **27**, wherein the at

2   least one of the processors and memory are further adapted for:

3   receiving a query for correlation information regarding a particular session or call,

4   wherein the query is sent by a first one of the services; and

5   sending correlation information to the first service related to the particular session or call

6   of the query.

1   41.   (Currently Amended) A computer system as recited in claim [[26]] **27**, wherein at least

2   one of the services is a routing script.

1   42.   (Currently Amended) A computer program product for correlating services within a

2   computer network, the computer program product comprising:

3   at least one computer readable medium;

4   computer program instructions stored within the at least one computer readable medium

5   configured for:

6   providing a message interchange network for exchanging application-level

7   messages between services, the message interchange network **being built on an open**

8   **platform overlaying a public network and** managing a plurality of services, ~~which are~~

9   each **of the services being** accessible by a plurality of services **according to properties**

10   **and permissions associated with each service in the plurality of services**; and

11   tracking correlation information regarding each application-level message

12   received into message interchange network, wherein the application-level messages are

13   being sent between pairs of the services, wherein the correlation information for each

14   application-level message pertains to each application-level message and any other

15   application-level messages related to the each application-level message**, the correlation**

16   **information including one or more of: a Hop Identifier (ID) uniquely identifying a**

17   **hop between a sender and receiver of the each application-level message, call**

18   **information regarding a call to which the each application-level message and any**

19   **other related application-level message belongs, and session information regarding a**

20   **session to which the each application-level message and any other related**

21   **application-level message belongs.**

1   43.   (Cancelled)

1   44   (Cancelled)

1   45.   (Currently Amended) A computer program product as recited in claim [[44]] <u>42</u>, wherein
2   the message information for each application-level message further includes an identification of
3   the each application-level message's sending service and receiving service.

1   46.   (Currently Amended) A computer program product as recited in claim [[44]] <u>42</u>, wherein
2   the message information for each application-level message further includes an indication as to
3   whether the each application-level message has completed transmission.

1   47.   (Previously Presented) A computer program product as recited in claim 46, wherein the
2   message information for each application-level message further includes a reason or error log
3   regarding why the each application-level message has failed to complete its transmission if the
4   each application-level message has failed.

1   48.   (Currently Amended) A computer program product as recited in claim [[44]] <u>42</u>, wherein
2   the message information for each application-level message further includes a portion of the each
3   message content.

1   49.   (Currently Amended) A computer program product as recited in claim [[44]] <u>42</u>, wherein
2   the message information for each application-level message further includes two or more of the
3   following: an identification of the each application-level message's sending and receiving
4   service, an indication as to whether the each application-level message has completed
5   transmission, a reason or error log regarding why the each application-level message has failed
6   to complete its transmission if the each application-level message has failed, and a portion of the
7   each application-level message content, a size of the each application-level message, a topic of
8   the each application-level message, a status on processing steps taken on the each application-
9   level message, and specification of any protocols used in receiving and sending the each
10 application-level message.

1   50.   (Currently Amended) A computer program product as recited in claim [[43]] <u>42</u>, wherein
2   the call information for each call includes a Call Identifier (ID) uniquely identifying the each
3   call.

1   51.   (Original) A computer program product as recited in claim 50, wherein the call
2   information for each call further includes two or more of the following: an indication as to
3   whether the each call is complete and a reason for the call not being complete if the each call
4   fails to complete, a type of each call, a receiving and sending time for the each call, a sender and
5   recipient service of each call, a status of policy evaluation for each call, and a set of hops in each
6   call.

1   52.   (Currently Amended) A computer program product as recited in claim [[43]] 42, wherein
2   the session information for each session includes a Session Identifier (ID) uniquely identifying
3   the each session.

1   53.   (Original) A computer program product as recited in claim 52, wherein the session
2   information for each session further includes an indication as to whether the each session is
3   complete and a reason for the session not being complete if the each session fails to complete.

1   54.   (Previously Presented) A computer program product as recited in claim 52, wherein the
2   session information for each session further includes a calculated or executed route for
3   application-level messages sent within the each session.

1   55.   (Original) A computer program product as recited in claim 52, wherein the session
2   information for each session further includes an identity and status of each service of the each
3   session.

1   56.   (Original) A computer program product as recited in claim 52, wherein the session
2   information for each session further includes two or more of the following: an indication as to
3   whether the each session is complete and a reason for the session not being complete if the each
4   session fails to complete, a calculated or executed route for messages sent within the each
5   session, and an identity and status of each service of the each session, a initiating time and
6   completion time for each session, an indication of a set of calls in each session.

1   57.   (Currently Amended) A computer program product as recited in claim [[43]] 42, wherein
2   each message belongs to a particular call between two of the services.

1   58.   (Currently Amended) A computer program product as recited in claim [[43]] **42**, wherein

2   each call includes a request message and a response message or a notification message.

1   59.   (Currently Amended) A computer program product as recited in claim [[43]] **42**, wherein

2   a call is defined as a set of predefined application-level message types.

1   60.   (Currently Amended) A computer program product as recited in claim [[43]] **42**, wherein

2   a session is determined by the services which send application-level messages for the set of calls

3   as a set of calls.

1   61.   (Original) A computer program product as recited in claim 42, wherein at least some of

2   services are implemented on difference computer systems and at least some of these computer

3   systems differ from a computer system which implements the message interchange network.

1   62.   (Currently Amended) A computer program product as recited in claim [[43]] **42**, wherein

2   the tracking of correlating information comprises:

3   receiving a current application-level message at the message interchange network,

4   wherein the current application-level message belongs to a current session and a current call;

5   when the received current application-level message is a first message received for the

6   current session, assigning a session identifier for the current message and embedding the session

7   identifier in the current application-level message prior to forwarding ~~it~~ the application-level

8   message to its destination service;

9   when the received current application-level message is a first message received for the

10   current call, assigning a call identifier for the current application-level message and embedding

11   the call identifier in the current application-level message prior to forwarding ~~it~~ the application-

12   level message to its destination service;

13   assigning a hop identifier for the current application-level message which uniquely

14   identifies the current application-level message; and

15   associating and storing the session identifier, the call identifier, and the hop identifier,

16   along with message information, call information, and session information for the received

17   application-level message.

1   63.   (Currently Amended) A computer program product as recited in claim [[43]] **42**, wherein

2   the computer ~~readable~~ **program** product is further configured for:

3   receiving a query for correlation information regarding a particular session or call,

4   wherein the query is sent by a first one of the services; and

5   sending correlation information to the first service related to the particular session or call

6   of the query.

1   64.   (Previously Presented) A computer program product as recited in claim 63, wherein the

2   correlation information includes information regarding application-level messages sent between

3   more than two services.

1   65.   (Currently Amended) A computer program product as recited in claim 63, wherein the

2   computer ~~readable~~ **program** product is further configured for determining whether the first

3   service is authorized to make the query and only sending correlation information to the first

4   service when it is determined that the first service is authorized.

1   66.   (Original) A computer program product as recited in claim 42, wherein at least one of

2   the services is a routing script.

1   67.   (Previously Presented) A computer program product as recited in claim 42, wherein the

2   correlation information includes at least one message identifier specified in at least one of the

3   application-level messages which is sent by a sending service, the method further comprising:

4   receiving a query for correlation information regarding a particular message identifier,

5   wherein the query is sent by a first one of the services; and

6   sending correlation information to the first service related to the particular message

7   identifier of the query.